IPv6 Provider Edge Routers (6PE) Information Base (MIB)

draft-chen-mpls-6pe-mib-02.txt

IETF 81-Quebec, July 2011

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Outline

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Introduction

- This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community

- In particular, it describes a MIB module for IPv6 Provider Edge Routers (6PE)over Multiprotocol Label Switching (MPLS) Label Switching Routers (LSRs)

Related works

- RFC 4087 has specified managed objects used for managing tunnels of any type over IPv4 and IPv6 networks. But this MIB module does not support tunnels over non-IP networks

- RFC4382 has defined managed objects to configure and monitor MPLS layer 3 Virtual Private Networks. However, 6PE is neither Layer 3 IP tunnel nor MPLS layer 3 VPN.

Overview of MIB objects

- 6PETunnelIfTable
  - 6PETunnelIfTable are defined in the MIBs defining the encapsulation. An entry in the 6PE Tunnel MIB will exist for every interface entry with this interface type

- 6PEMplsIfTable
  - This table controls MPLS-specific parameters when 6PE is going to be carried over MPLS cloud.

6PE-MPLS-STD-MIB Module Definitions

- 6PETunnelIfTable
- 6PETunnelIfEntry ::= SEQUENCE {

  6PETunnelIfHopLimit   Integer32,
  6PETunnelIfSecurity   INTEGER,
  6PETunnelIfTOS   Integer32,
  6PETunnelIfFlowLabel   IPv6FlowLabelOrAny
  6PETunnelIfLocalAddress   InetAddress,
  6PETunnelIfRemoteAddress   InetAddress
  }

6PEMplsIfTable
6PEMplsEntry

Comments are welcomed!

Thank You!